

PATENT ABSTRACTS OF JAPAN

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(21)Application number : 03-247095

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(22)Date of filing : 30.08.1991

(72)Inventor : KOSAKA REIKO

(54) TASTINESS IMPROVER FOR MEAT, FISHES AND SHELLFISHES**(57)Abstract:**

PURPOSE: To obtain the subject tasty freshness retaining agent, containing papain and an organic acid without any fishy, medicinal and muddy odor and useful for cattle, eel, lobster or shrimp, short-necked clam, etc.

CONSTITUTION: The objective freshness retaining agent contains papain and an organic acid such as citric acid, malic acid or glutamic acid. Furthermore, the above-mentioned freshness retaining agent is preferably used as an aqueous solution, an emulsion, a granule or powder and the ratio of the papain to the organic acid used is preferably 0.5-5 pts.wt. organic acid based on 1 pt.wt. papain.

LEGAL STATUS

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CLAIMS

[Claim(s)]

[Claim 1] The meat, the taste amelioration agent of a fishery product which are characterized by containing a papain and an organic acid.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to meat and the taste amelioration agent of a fishery product.

[0002]

[Description of the Prior Art] Also in a fishery product, in culture, an eel carries out long and as various in a pond illnesses as *****, and is very weak also to a natural phenomenon, for example. Therefore, various kinds of medicine is used from a degree to a degree, and there are much the so-called overmedication and the so-called intermediary cage, malformation, and deformation. Therefore, even if it eats the eel kept in the pond, it is fishy, and there is the strange smell of a medicinal residual, and a hide becomes hard and is bad as a kitchen knife for a long period of time. Moreover, it may be unrefined.

[0003] Moreover, when meat, a bonito, etc. are used as chopped raw fish or sliced raw fish, it is fishy in many cases.

[0004]

[Problem(s) to be Solved by the Invention] even if the purpose of this invention prevents and eats illness and a bacillus -- fishiness -- medicine smell -- there is unrefined [no], it is good as a hide is a kitchen knife softly, and it becomes tight, and is in offering delicious meat, the meat which can give a fishery product, and the taste amelioration agent of a fishery product.

[0005]

[Means for Solving the Problem] This invention relates to the meat and the taste amelioration agent of a fishery product which are characterized by containing a papain and an organic acid.

[0006] The papain used by this invention is the enzyme extracted from the seed of a papaya, a trunk, a leaf, fruits, etc., and the thing of usually powdered or granularity is used advantageously. An organic acid can also usually use a commercial thing, for example, a citric acid, a lactic acid, a succinic acid, a malic acid, an aspartic acid, glutamic acid, a tartaric acid, a gluconic acid, an acetic acid, a fumaric acid, etc. can be mentioned.

[0007] The constituent of this invention can mention the approach of using with various gestalten, for example, using as a water solution, an emulsion, a granule, and powder etc.

[0008] It is also effective in the constituent of this invention to add various kinds of vitamins, such as vitamin C.

[0009] Although the rate of the papain which is the active principle compound contained in the constituent of this invention, and an organic acid can be selected from the large range, it is desirable 0.05 - 20 weight section and to carry out 0.5-5 weight section use of the latter for the latter to the 1 former weight section to the 1 former weight section further especially.

[0010] Although especially the total quantity of the active principle in a constituent is not limited in this invention but it can select broadly, it is usually about 20 - 100 % of the weight preferably about one to 100% of the weight among [all] a constituent.

[0011] While it is used as a water solution and is valid in it in the case of the fishery product, when letting swim for about 30 minutes or it is dead, the constituent of this invention opens remaining as it is or an antinode, and it can soak into a water solution or it can improve the taste of meat and a fishery product by ***** 1 to several times.

[0012] In this invention, as meat, meat, such as a cow, Buta, Tori, a sheep, a wild boar, and a horse, can be mentioned, and various kinds of things, such as an eel, a loach, a carp, a crucian carp, a bonito, a flying fish, a yellowtail, buri, a horse mackerel, Sabah, a hairtail, a freshwater clam, a littleneck clam, a hard clam, an oyster, a scallop, an ear shell, an ark shell, and a cockle, can be mentioned as a fishery product.

[0013]

[Example] The example of manufacture and the example of a trial of a constituent of this invention are shown below.

[0014] Example of manufacture 1 papain 5g and citric acid It is water about 15g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0015] Example of manufacture 2 papain 10g and malic acid It is water about 5g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0016] Example of manufacture 3 papain 10g and glutamic acid It is water about 10g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0017] After making it pass through example of trial 1 mutton 3 times in the water solution of the example 1 of manufacture, when it cooks, it is [no fishiness] and is delicious, and it is *****.

[0018] It is good as a hide is a kitchen knife softly, when it cooks, after letting swim the eel which was useful example of trial 2 for 20 minutes in the water solution of the example 1 of manufacture, and it is not [when it burned and eats / fishiness, medicine stink, and unrefined] and is delicious, and *****.

[0019] the place processed like [carp] the example 2 of a trial instead of the example of trial 3 eel -- fishiness -- medicine smell -- the place which there is unrefined [no], an insect did not seethe with ERA, and mold did not occur, but the pattern of a scale was also clear, was beautiful and ate it -- the body -- a striped intermediary cage -- delicious -- *****.

[0020] the place cooked after killing example of trial 4 bonito and making it pass through 5 times in the water solution of the example 2 of manufacture -- fishiness -- there is nothing -- the body -- a striped intermediary cage -- delicious -- chopped raw fish and sliced raw fish -- good -- *****.

[0021] the place processed like [hairtail / a flying fish and] the example 4 of a trial instead of example of trial 5 bonito -- fishiness -- there is nothing -- the body -- a striped intermediary cage -- delicious -- *****.

[Translation done.]

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TECHNICAL FIELD

[Industrial Application] This invention relates to meat and the taste amelioration agent of a fishery product.

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PRIOR ART

[Description of the Prior Art] Also in a fishery product, in culture, an eel carries out long and as various in a pond illnesses as *****, and is very weak also to a natural phenomenon, for example. Therefore, various kinds of medicine is used from a degree to a degree, and there are much the so-called overmedication and the so-called intermediary cage, malformation, and deformation. Therefore, even if it eats the eel kept in the pond, it is fishy, and there is the strange smell of a medicinal residual, and a hide becomes hard and is bad as a kitchen knife for a long period of time. Moreover, it may be unrefined.

[0003] Moreover, when meat, a bonito, etc. are used as chopped raw fish or sliced raw fish, it is fishy in many cases.

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PRIOR ART

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] even if the purpose of this invention prevents and eats illness and a bacillus -- fishiness -- medicine smell -- there is unrefined [no], it is good as a hide is a kitchen knife softly, and it becomes tight, and is in offering delicious meat, the meat which can give a fishery product, and the taste amelioration agent of a fishery product.

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MEANS

[Means for Solving the Problem] This invention relates to the meat and the taste amelioration agent of a fishery product which are characterized by containing a papain and an organic acid.

[0006] The papain used by this invention is the enzyme extracted from the seed of a papaya, a trunk, a leaf, fruits, etc., and the thing of usually powdered or granularity is used advantageously. An organic acid can also usually use a commercial thing, for example, a citric acid, a lactic acid, a succinic acid, a malic acid, an aspartic acid, glutamic acid, a tartaric acid, a gluconic acid, an acetic acid, a fumaric acid, etc. can be mentioned.

[0007] The constituent of this invention can mention the approach of using with various gestalten, for example, using as a water solution, an emulsion, a granule, and powder etc.

[0008] It is also effective in the constituent of this invention to add various kinds of vitamins, such as vitamin C.

[0009] Although the rate of the papain which is the active principle compound contained in the constituent of this invention, and an organic acid can be selected from the large range, it is desirable 0.05 - 20 weight section and to carry out 0.5-5 weight section use of the latter for the latter to the 1 former weight section to the 1 former weight section further especially.

[0010] Although especially the total quantity of the active principle in a constituent is not limited in this invention but it can select broadly, it is usually about 20 - 100 % of the weight preferably about one to 100% of the weight among [all] a constituent.

[0011] While it is used as a water solution and is valid in it in the case of the fishery product, when letting swim for about 30 minutes or it is dead, the constituent of this invention opens remaining as it is or an antinode, and it can soak into a water solution or it can improve the taste of meat and a fishery product by ***** 1 to several times.

[0012] In this invention, as meat, meat, such as a cow, Buta, Tori, a sheep, a wild boar, and a horse, can be mentioned, and various kinds of things, such as an eel, a loach, a carp, a crucian carp, a bonito, a flying fish, a yellowtail, buri, a horse mackerel, Sabah, a hairtail, a freshwater clam, a littleneck clam, a hard clam, an oyster, a scallop, an ear shell, an ark shell, and a cockle, can be mentioned as a fishery product.

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EXAMPLE

[Example] The example of manufacture and the example of a trial of a constituent of this invention are shown below.

[0014] Example of manufacture 1 papain 5g and citric acid It is water about 15g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0015] Example of manufacture 2 papain 10g and malic acid It is water about 5g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0016] Example of manufacture 3 papain 10g and glutamic acid It is water about 10g. It dissolves in 10l. and the constituent (water solution) of this invention is obtained.

[0017] After making it pass through example of trial 1 mutton 3 times in the water solution of the example 1 of manufacture, when it cooks, it is [no fishiness] and is delicious, and it is *****.

[0018] It is good as a hide is a kitchen knife softly, when it cooks, after letting swim the eel which was useful example of trial 2 for 20 minutes in the water solution of the example 1 of manufacture, and it is not [when it burned and eats / fishiness, medicine stink, and unrefined] and is delicious, and *****.

[0019] the place processed like [carp] the example 2 of a trial instead of the example of trial 3 eel -- fishiness -- medicine smell -- the place which there is unrefined [no], an insect did not seethe with ERA, and mold did not occur, but the pattern of a scale was also clear, was beautiful and ate it -- the body -- a striped intermediary cage -- delicious -- *****.

[0020] the place cooked after killing example of trial 4 bonito and making it pass through 5 times in the water solution of the example 2 of manufacture -- fishiness -- there is nothing -- the body -- a striped intermediary cage -- delicious -- chopped raw fish and sliced raw fish -- good -- *****.

[0021] the place processed like [hairtail / a flying fish and] the example 4 of a trial instead of example of trial 5 bonito -- fishiness -- there is nothing -- the body -- a striped intermediary cage -- delicious -- *****.

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WRITTEN AMENDMENT

[Procedure revision]

[Filing Date] November 30, Heisei 4

[Procedure amendment 1]

[Document to be Amended] Specification

[Item(s) to be Amended] Claim 1

[Method of Amendment] Modification

[Proposed Amendment]

[Claim 1] The meat characterized by containing a papain and an organic acid, taste amelioration of a fishery product, a freshness maintenance agent.

[Procedure amendment 2]

[Document to be Amended] Specification

[Item(s) to be Amended] 0004

[Method of Amendment] Modification

[Proposed Amendment]

[0004]

[Problem(s) to be Solved by the Invention] even if the purpose of this invention prevents and eats illness and a bacillus -- fishiness -- medicine smell -- the freshness maintenance is good, there is unrefined [no], therefore it is good as a hide is a kitchen knife softly, and it becomes tight, and is in offering delicious meat, the meat which can give a fishery product, taste amelioration of a fishery product, and a freshness maintenance agent.

[Procedure amendment 3]

[Document to be Amended] Specification

[Item(s) to be Amended] 0005

[Method of Amendment] Modification

[Proposed Amendment]

[0005]

[Means for Solving the Problem] This invention relates to the meat characterized by containing a papain and an organic acid, taste amelioration of a fishery product, and a freshness maintenance agent.

[Procedure amendment 4]

[Document to be Amended] Specification

[Item(s) to be Amended] 0011

[Method of Amendment] Modification

[Proposed Amendment]

[0011] The constituent of this invention can open remaining as it is or an antinode, while it is valid in it in the case of the fishery product, when letting swim for about 30 minutes or it is dead, it can be used as a water solution, it can soak into a water solution or it can improve the taste of meat and a fishery product by ***** 1 to several times, or it can maintain freshness. Moreover, it is also possible to breed a shrimp, for example with salt water, and ***** is also long duration energy in the water

solution of the constituent of this invention.

[Procedure amendment 5]

[Document to be Amended] Specification

[Item(s) to be Amended] 0012

[Method of Amendment] Modification

[Proposed Amendment]

[0012] In this invention, as meat, meat, such as a cow, Buta, Tori, a sheep, a wild boar, and a horse, can be mentioned, and various kinds of things, such as an eel, a loach, a carp, a crucian carp, a bonito, a flying fish, a yellowtail, buri, a horse mackerel, Sabah, a shrimp, a hairtail, a freshwater clam, a littleneck clam, a hard clam, an oyster, a scallop, an ear shell, an ark shell, and a cockle, can be mentioned as a fishery product.

[Translation done.]

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(22)出願日 平成3年(1991)8月30日

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(74)代理人 弁理士 田村 巖

(54)【発明の名称】 肉、魚貝類の呈味改良剤

(57)【要約】 (修正有)

【目的】 食しても生臭さ、渠臭さ、泥臭さがなく、皮が柔らかく包丁の通りが良く、身がしまり、美味しい肉、魚貝類を付与し得る肉、魚貝類の呈味改良剤を提供する。

【構成】 パパイン及びクエン酸、リンゴ酸又はグルタミン酸等の有機酸を含有することにより得られる肉、魚貝類の呈味改良剤。

(2)

特開平5-91855

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【特許請求の範囲】

【請求項1】 パパイン及び有機酸を含有することを特徴とする肉、魚貝類の呈味改良剤。

【発明の詳細な説明】

【0001】

【産業上の利用分野】 本発明は肉、魚貝類の呈味改良剤に関する。

【0002】

【従来の技術】 魚貝類の中でも、例えばうなぎは養殖の場合、長く池に飼っていると色々の病気をし、又、自然現象にも非常に弱い。その為に各種の薬が次から次へと用いられ、いわゆる薬漬けとなっており、奇形、変形が多い。従って長期間、池に飼われたうなぎは食しても生臭く、薬の残留の異様な臭いがし、皮は堅くなり包丁の通りが悪い。又、泥臭い場合もある。

【0003】 又、肉類、カツオ等もタタキや刺身にした場合、生臭い場合が多い。

【0004】

【発明が解決しようとする課題】 本発明の目的は病気や菌を防除し、食しても生臭さ、薬臭さ、泥臭さがなく、皮が柔らかく包丁の通りが良く、身がしまり、美味な肉、魚貝類を付与し得る肉、魚貝類の呈味改良剤を提供することにある。

【0005】

【課題を解決するための手段】 本発明はパパイン及び有機酸を含有することを特徴とする肉、魚貝類の呈味改良剤に係る。

【0006】 本発明で使用するパパインはパパヤの種、幹、葉、果実等から採取される酵素で、通常粉末状または顆粒状のものが有利に使用される。有機酸も通常市販のものを使用することができ、例えばクエン酸、乳酸、コハク酸、リンゴ酸、アスパラギン酸、グルタミン酸、酒石酸、グルコン酸、酢酸、フマル酸等を挙げることができる。

【0007】 本発明の組成物は種々の形態で用いることができ、例えば水溶液、乳剤、粒剤、粉末として用いる方法等を挙げることができる。

【0008】 本発明の組成物にはビタミンC等の各種のビタミン類を添加することも有効である。

【0009】 本発明の組成物に含有される有効成分化合物であるパパインと有機酸の割合は広い範囲から選定可能であるが、特に前者の1重量部に対して後者を0.05～20重量部、更には前者の1重量部に対して後者を0.5～5重量部使用するのが好ましい。

【0010】 本発明において組成物中の有効成分の合計量は特に限定されず広範囲に選定可能であるが、通常は

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全組成物中約1～100重量%、好ましくは約20～100重量%である。

【0011】 本発明の組成物は例えば水溶液にして、その中に魚貝類の場合、生きている内に30分位泳がしたり、或いは死んでいる場合はそのまましくは腹を開いて水溶液中に漬けたり、又は1～数回くぐらすことにより肉、魚貝類の呈味を改良することができる。

【0012】 本発明において肉類としてはウシ、ブタ、トリ、羊、イノシシ、ウマ等の肉を、魚貝類としてはうなぎ、ドジョウ、コイ、フナ、カツオ、トビウオ、ハマチ、ブリ、アジ、サバ、タチウオ、シジミ、アサリ、ハマグリ、カキ、ホタテ貝、アワビ、赤貝、トリガイ等各種のものを挙げることができる。

【0013】

【実施例】 以下に本発明の組成物の製造例及び試験例を示す。

【0014】 製造例1

パパイン 5g及びクエン酸 15gを水 10リットルに溶解して本発明の組成物（水溶液）を得る。

【0015】 製造例2

パパイン 10g及びリンゴ酸 5gを水 10リットルに溶解して本発明の組成物（水溶液）を得る。

【0016】 製造例3

パパイン 10g及びグルタミン酸 10gを水 10リットルに溶解して本発明の組成物（水溶液）を得る。

【0017】 試験例1

羊肉を製造例1の水溶液中に3回くぐらせた後、料理したところ、生臭さがなく美味であった。

【0018】 試験例2

生きたうなぎを製造例1の水溶液中に20分間泳がせた後、料理したところ、皮が柔らかく包丁の通りが良く、焼いて食したところ生臭さ、薬臭さ、泥臭さがなく美味であった。

【0019】 試験例3

うなぎの代りにコイについても試験例2と同様に処理したところ、生臭さ、薬臭さ、泥臭さがなく、エラに虫がわからず、カビが発生せず、鱗の模様も鮮明で美しく、食したところ身がしまっており、美味であった。

【0020】 試験例4

カツオを殺して製造例2の水溶液中に5回くぐらせた後、料理したところ、生臭さがなく、身がしまっており、美味で、タタキ、刺身共に良好であった。

【0021】 試験例5

カツオの代りにトビウオ、タチウオについても試験例4と同様に処理したところ、生臭さがなく、身がしまっており、美味であった。

(3)

特開平5-91855

【手続補正書】

【提出日】平成4年11月30日

【手続補正1】

【補正対象書類名】明細書

【補正対象項目名】請求項1

【補正方法】変更

【補正内容】

【請求項1】 パパイン及び有機酸を含有することを特徴とする肉、魚貝類の呈味改良、鮮度維持剤。

【手続補正2】

【補正対象書類名】明細書

【補正対象項目名】0004

【補正方法】変更

【補正内容】

【0004】

【発明が解決しようとする課題】本発明の目的は病気や菌を防除し、食しても生臭さ、薬臭さ、泥臭さがなく、従つてその鮮度維持が良好で、皮が柔らかく包丁の通りが良く、身がしまり、美味な肉、魚貝類を付与し得る肉、魚貝類の呈味改良、鮮度維持剤を提供することにある。

【手続補正3】

【補正対象書類名】明細書

【補正対象項目名】0005

【補正方法】変更

【補正内容】

【0005】

【課題を解決するための手段】本発明はパパイン及び有

機酸を含有することを特徴とする肉、魚貝類の呈味改良、鮮度維持剤に係る。

【手続補正4】

【補正対象書類名】明細書

【補正対象項目名】0011

【補正方法】変更

【補正内容】

【0011】本発明の組成物は例えば水溶液にして、その中に魚貝類の場合、生きている内に30分位泳がしたり、或いは死んでいる場合はそのまましくは腹を開いて水溶液中に漬けたり、又は1〜数回くぐらすことにより肉、魚貝類の呈味を改良し、或いは鮮度を維持することができる。又、例えば塩水でエビを飼育することも可能で、釣つた魚も本発明の組成物の水溶液中では長時間元気である。

【手続補正5】

【補正対象書類名】明細書

【補正対象項目名】0012

【補正方法】変更

【補正内容】

【0012】本発明において肉類としてはウシ、ブタ、トリ、羊、イノシシ、ウマ等の肉を、魚貝類としてはうなぎ、ドジョウ、コイ、フナ、カツオ、トビウオ、ハマチ、ブリ、アジ、サバ、エビ、タチウオ、シジミ、アサリ、ハマグリ、カキ、ホタテ貝、アワビ、赤貝、トリガイ等各種のものを挙げることができる。